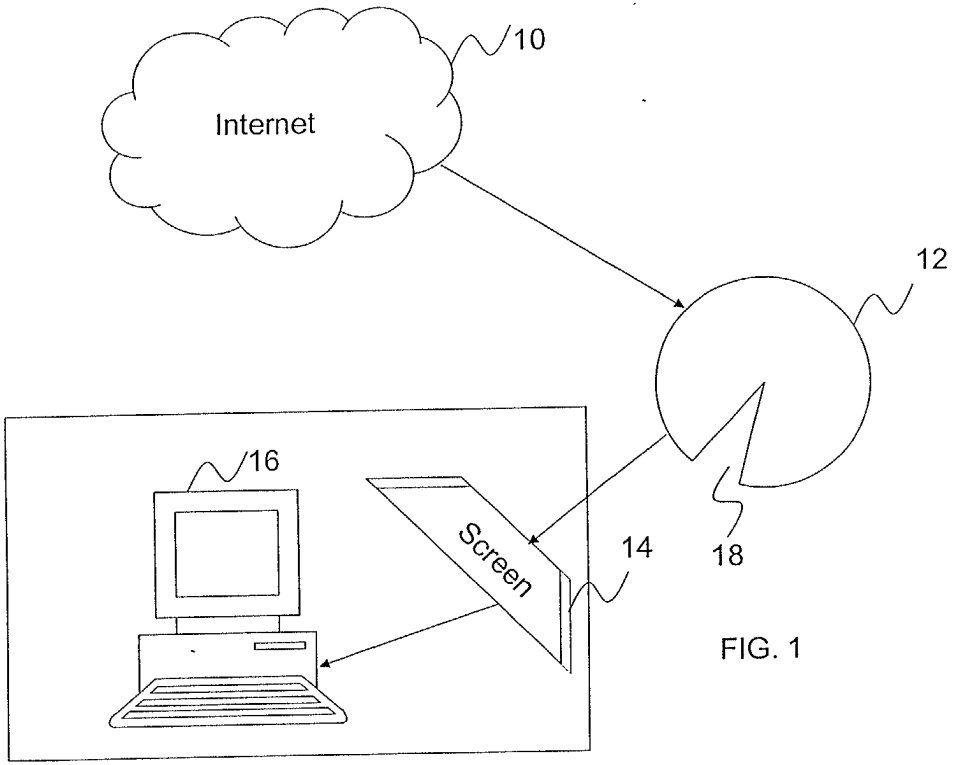

FIG. 1

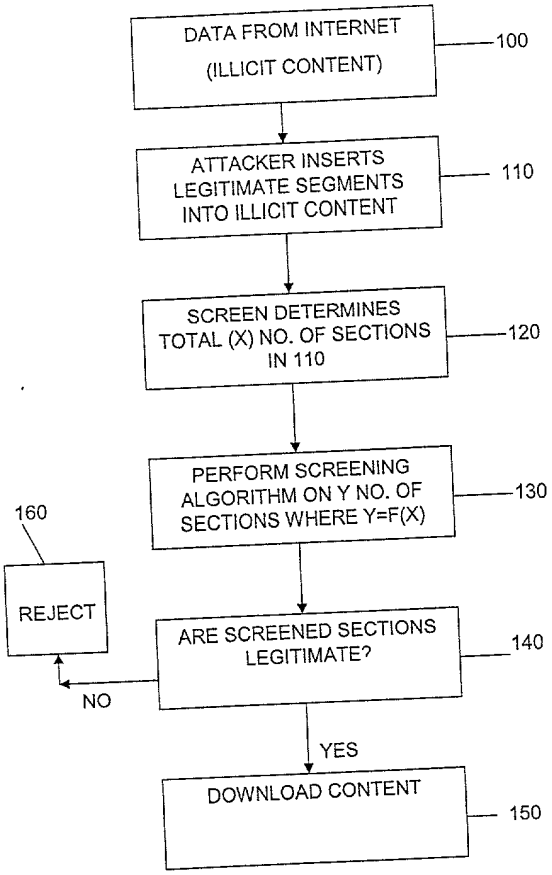
DATA FROM INTERNET
(ILLICIT CONTENT)
100
ATTACKER INSERTS LEGITIMATE SEGMENTS INTO ILLICIT CONTENT
110
SCREEN DETERMINES TOTAL (X) NO. OF SECTIONS IN 110
120
PERFORM SCREENING ALGORITHM ON Y NO. OF SECTIONS WHERE Y=F(X)
130
160
REJECT
ARE SCREENED SECTIONS LEGITIMATE?
140
NO
YES
DOWNLOAD CONTENT
150

FIG. 2

Starting number of checked sections		2												
Increase checked sections by		1 every		1 minute										
Number of sections to check		2	2	2	2	2	2	2	2	2	2	2	2	3
SongLength (seconds) (includes legitimate sections)		15	30	45	60	75	90	105	120	135	150	165	180	195
SongLength (sections) (includes legitimate sections)		1	2	3	4	5	6	7	8	9	10	11	12	13
LegitimateSections	1	100 0%	25 0%	11 1%	6 3%	4 0%	2 8%	2 0%	1 6%	1 2%	1 0%	0 8%	0 7%	0 0%
	2		100 0%	44 4%	25 0%	16 0%	11 1%	8 2%	6 3%	4 9%	4 0%	3 3%	2 8%	0 4%
	3			100 0%	56 3%	36 0%	25 0%	18 4%	14 1%	11 1%	9 0%	7 4%	6 3%	1 2%
	4				100 0%	64 0%	44 4%	32 7%	25 0%	19 8%	16 0%	13 2%	11 1%	2 9%
	5					100 0%	69 4%	51 0%	39 1%	30 9%	25 0%	20 7%	17 4%	5 7%
	6						100 0%	73 5%	56 3%	44 4%	36 0%	29 8%	25 0%	9 8%
	7							100 0%	76 6%	60 5%	49 0%	40 5%	34 0%	15 6%
	8								100 0%	79 0%	64 0%	52 9%	44 4%	23 3%
	9									100 0%	81 0%	66 9%	56 3%	33 2%
	10										100 0%	82 6%	69 4%	45 5%
	11											100 0%	84 0%	60 6%
	12												100 0%	78 7%
	13													100 0%
	14													
	15													
	16													
	17													
	18													
	19													
	20													
	21													
	22													

FIG. 3